

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-6. (Canceled)

7. (Original): A recording medium on which information is recorded by applying a laser pulse to form a mark on a recording layer, the recording medium containing control parameters recorded for respective linear velocities decided by:

- a step of recording a first mark having a length not smaller than the laser spot diameter in the recording layer at a first linear velocity;
- a step of recording a second mark having a length equivalent to the first mark at a second linear velocity;
- a step of calculating an average value of the voltage values during an interval T_s ($T_s < T_m/2$) in the time axis direction before and after the time position reference $T_m/2$ from the front edge of an electric signal waveform obtained by reproducing the first or the second mark at a predetermined linear velocity and having a time width T_m ; and
- a step of deciding a control parameter of the laser pulse power level change timing so that the aforementioned average value is substantially constant during recording at any of the linear velocities.

1 8. (Currently amended): A recording medium as claimed in ~~any one of~~
2 ~~claims 5 to claim~~ 7, wherein:
3 a control parameter corresponding to a third linear velocity which is faster than
4 the first linear velocity and slower than the second linear velocity is further recorded, and
5 the control parameter corresponding to the third linear velocity is a control
6 parameter obtained by linear interpolation of the control parameter corresponding to the first
7 linear velocity and the control parameter corresponding to the second linear velocity.

1 9. (Original): A recording medium as claimed in claim 8, wherein the
2 control parameter corresponding to the third linear velocity is a control parameter obtained by
3 calculating a voltage value change amount at two points at a distance T_s ($T_s < T_m/2$) in the time
4 axis direction before and after the time position reference $T_m/2$ from the front edge of an electric
5 signal waveform having a time width T_m obtained by reproducing at a predetermined linear
6 velocity a third mark having a length equivalent to the first mark which third mark has been
7 recorded at a third linear velocity by the control parameter obtained by linear interpolation of the
8 control parameter corresponding to the first linear velocity and the control parameter
9 corresponding to the second linear velocity, and confirming that the change amount is
10 substantially constant during recording at any of the linear velocities.

1 10. (Original): A recording medium as claimed in claim 8, wherein the
2 control parameter corresponding to the third linear velocity is obtained by recording the third
3 mark having a length equivalent to the first mark at the third linear velocity by the control
4 parameter obtained by linear interpolation of the control parameter corresponding to the first
5 linear velocity and the control parameter corresponding to the second linear velocity and by
6 confirming that the reproduction jitter or reproduction waveform asymmetry obtained when the
7 third mark is reproduced has a predetermined quality.

1 11. (Currently amended): A recording medium as claimed in ~~any one of~~
2 ~~claims 5 to claim~~ 7, wherein:
3 a control parameter corresponding to a third linear velocity which is faster than
4 the first linear velocity and slower than the second linear velocity is further recorded, and
5 the control parameter corresponding to the third linear velocity is a control
6 parameter obtained by linear interpolation of the value of the control parameter corresponding to
7 the first velocity normalized by the recording clock cycle at the first linear velocity and the value
8 of the control parameter corresponding to the second velocity normalized by the recording clock
9 cycle at the second linear velocity.

1 12. (Currently amended): A recording medium as claimed in ~~any one of~~
2 ~~claims 5 to claim~~ 7, wherein identification information which ~~ndicates~~ indicates the control
3 parameter group decided by the decision step is recorded.

13-25. (Canceled)